GENERAL MEETING OF INSTITUTION OF CIVIL ENGINEERS.—On the 16th of January, Mr. Field, President, in the chair, the annual general meeting of this institution was held, when the following gentlemen were elected to form the council for the ensuing year:—J. Field, President; W. Cubitt, J. M. Rendel, J. Simpson, and R. Stephenson, M.P., Vice-Presidents; I. F. Bateman, G. P. Bidder, I. K. Brunel, J. Cubitt, T. Fowler, C. H. Gregory, J. Locke, M.P., I. R. McLean, C. May, and J. Miller, Members; and W. Harding and T. Piper, Associates of Council. The report of the Council was read, and with reference to the pressure of the times, held out cheering hopes for the future, for, as it observed, "in a country like Great Britain, whose distinguishing characteristic is energetic and indomitable courage in circumstances of difficulty, it is not probable that any foreign political excitement can long continue to exercise a prejudicial effect: already the horizon is brightening, and a little reflection will demonstrate that, in proportion to the injury arising from the late stagnation, must be the activity on the resumption of the works;" and it appears to be acknowledged that the forced economy which has been practised during the past year, has caused such a necessity for supplies of working stock, and for the improvement of works, that the engineering profession must be generally benefited on the return of confidence in financial affairs." Satisfactory reasons were given for the annual delay in the publication of the minutes of proceedings; and a plan was detailed for paying off the debt incurred for the alterations of the house of the institution. Telford medals were presented to the Right Hon. the Earl of Lovelace, Messrs. Harrison, Mitchell, and Ransome; council premiums of books to Messrs. Harrison and Jackson, and Telford premiums of books to Messrs. Redman, Green, and Rankine; and memoirs were then read of deceased members.

THE WALLS OF ETRURIA.—Nothing, says Mr. Dennis, (in his work "The Cities and Cemeteries of Etruria,") gives a more exalted idea of the power and grandeur of this ancient people than the walls of their cities. These enormous piles of masonry, uncemented, yet so solid as to have withstood for three thousand years the destroying hand of man, the tempests, the earthquakes, the invisible yet more destructive power of atmospheric action, seem destined to endure to the end of time, yet often show a beauty, a perfection of workmanship that has never been surpassed. The style of masonry differs in the two great divisions of the land, and is determined in part by the nature of the local materials. In the northern district the walls are composed of huge blocks, rectangular in general, but of various sizes and irregular arrangement, according as the masses of rock were hewn or split from the quarry; and in some instances small pieces are inserted in the interstices of the larger blocks. There are, also, a few instances of the irregular, polygonal style,—as in the Cyclopean cities of central Italy. In the southern district the masonry is less massive and very regular.

A NEW LINE OF RAILWAY RESEARCH.—According to an amusing railway article in the *Quarterly Review*, attributed to Sir Francis Head, it appears from the books that the annual consumption at the Wolverton refreshment rooms averages—

182,500	Banbery cakes.	5,110	lbs. of moist sugar.
56,940	Queen's cakes.	16,425	quarts of milk.
29,200	pates.	1,095	,, cream.
36,500	lbs. of flour.	17,520	bott. of lemonade.
13,140	,, butter.	25,040	,, soda water.
2,920	,, coffee.	70,030	,, stout.
43,800	,, meat.	35,840	,, ale.
6,110	,, currants.	17,520	,, ginger beer.
1,277	,, tea.	730	,, port.
5,840	,, loaf sugar.	3,650	,, sherry.

And, we regret to add,

730 bottles of gin.
731 ,, rum.
3,660 ,, brandy.

To the eatables are to be added, or driven, thirty-five pigs, who, after having been from their birth most kindly treated and most luxuriously fed, are impartially promoted, by seniority, one after another, into an infinite number of pork pies.

ASHIESTEEL BRIDGE. — WHINSTONE RUBBLE CONSTRUCTION. — We mentioned some time since that a notice of this piece of construction, by Messrs. J. and T. Smith, of Darnick, was read at the Institute of Architects. The bridge has excited much interest in the neighbourhood, and we take the following particulars of it from the *Border Advertiser*:—The arch is elliptical, commencing from the abutments on each side with a short curve drawn to a radius of 24 feet, with a chord line of about 15 feet. This is surmounted by a curve drawn to a radius of 110 feet. The arch springs exactly from the summer level of the river, and its height is 26 feet, with a span of 131½ feet. The breadth of the arch at the abutments is nearly 19 feet, and converges by regular curve lines on each side to 16 feet at the crown. The thickness of the arch, from the abutments to within 24 feet of the keystone, is 2½ feet, backed by four ribs, each 2½ by 2½ feet, and the depth of the arch from there to the keystone is 4 feet. The spandril walls in the haunches rest upon the ribs already mentioned, and are so managed as to be an exact counterpoise to the crown of the arch. The plan of the bridge is simple and plain; and with the exception of the cornice and coping of the parapet walls, there is not a hewn stone in the whole building. The whole of the arch is of common whinstone rubble, built with lime, with here and there a little levelling of the beds with Roman cement. There has been much talk among engineers and architects, as well as others, as to the probable issue of the experiment, and many have been the prognostications of its failure. It is supposed to be the boldest arch ever executed of the same material. The estimate, we understand, was only about 1,200*l*. Ashiesteel is the place where Sir Walter Scott lived so long at, before sitting down at Abbotsford. It is some miles up Tweed.

SUBMARINE TELEGRAPHS.—Mr. Faraday having pointed attention to the highly insulating power of gutta percha, the very obvious application of it in covering the wires of the electric telegraph was forthwith suggested, as in a notice some time ago in THE BUILDER. The fact of its mere capability of doing so scarcely required a formal trial. What is of much more importance is to test its permanency, especially in sea-water, for marine telegraphs. A formal trial, however, of the mere fact of its waterproof and insulating properties was lately made at Folkstone, when, notwithstanding the stupid and absurd management alluded to by the *Literary Gazette*, it was of course found that messages conveyed from a steamer through coils laid through the harbour (they might as well have been laid in the Thames or in a bucket at the London station of the South-Eastern, and thus have saved the trouble of sending reporters all the way to Folkstone) were safely delivered in London, and met with a prompt response—all now mere child's play. The serious question is, whether gutta percha be a prudent coating under sea water, and accordingly it has been suggested that the potent halogens chlorine, bromine, and iodine, which pervade the ocean, as well as sulphuric and other acids also prevailing in marine combinations, may speedily macerate and alter, if not destroy, a vegetable substance such as it is. But there is even a still more imminent peril, that no one seems to have thought of. Gutta percha may be a perfect titbit to myriads of the heterogeneous and indescribable living creatures which teem in the ocean, and bore their way through sand, and wood, and rock, consuming all that is not mineral. Time only, with experiments on a comparatively small scale, should be the test of such destructive agencies, and then the "bites of large fishes," the "dragging of anchors," and other probable or dreaded agencies, may be dared on the large scale.

THE MODEL LODGING-HOUSE AT BATH has been opened in Westgate-buildings, for forty persons, with separate beds, washing-stands, cupboards and boxes with locks and keys for all, a coffee-room, sick-room, gas throughout, &c., all, with cooking and attendance, for 1s. 9d. a week, and yet self-supporting: testimonials as to character are very properly demanded from candidates for so much comparative comfort at so little expense.

TESTIMONIAL TO MR. VERNON. — The proposal to raise by subscription sufficient funds to pay for the preparation of dies, and to present annually a gold medal, to be called the Vernon medal, for the encouragement of painting and sculpture, and in commemoration of Mr. Vernon's gift to the nation, appears to have found favour with all parties. A committee has been formed, containing many excellent names, and will shortly put the plan before the public. The medal will be confided to the Royal Academy.

LARGE SCYTHE FACTORY IN AMERICA.—The scythe manufacturing establishment of Reuben B. Dunn, Esq., at North Wane, in Maine, is the largest of the kind in the world. The establishment consists, besides warehouses, furnishing shops, &c., of three principal buildings for manufacturing, two of which are 144 feet in length. In these, and in departments connected with the establishment, are employed about 100 men, many of whom have families settled at the place. A flourishing village has grown up within a few years, and is rapidly increasing. 12,000 dozen scythes are annually manufactured, to produce which are required 450,000 lbs. of iron, 75,600 lbs. of steel, 1,200 tons of hard coal, 10,000 bushels of charcoal, 100 tons of grindstones, and half a ton of borax. This last article is used in the process of welding. Mr. Dunn is erecting additional works in the vicinity, which will be soon completed, when he will be enabled to turn out 17,000 dozen scythes annually. This establishment is now more than double the extent of any other in the world—none even in England being found to compete with it.—*New York Farmer and Mechanic.*

THE IRON TRADE.—At the quarterly meetings just held, the masters again failed to raise prices, even as usual nominally, though, according to their out and out supporters, there was not only an improved demand, but a slight tendency to an advance. It must ever be remembered, however, that at these meetings of the masters, there is always 'a slight tendency to an advance.' Our steady refusal to quote their fictitious quarterly price-nominal, has at length been homologated by the example of one of their own respectable Birmingham supporters, the *Journal*, who says, "We will not attempt to give precise figures, inasmuch as prices, in some slight degree, must vary according to the situation of the works and the condition of the firms, &c.," all of which is quite true, if '&c.,' only comprehended the great desire of the quarterly meeters even for the nominal shadow of 'an advance,' failing the substance. For purchasers, the market is still of course in a very favourable position.

THE STATE OF THE SERPENTINE RIVER, HYDE-PARK.—Finding that no steps have yet been taken towards cleansing the Serpentine, a public meeting of the inhabitants of the neighbourhood was held at the Literary Institution, in Sloane-street, on Tuesday last, when Dr. Jas. Copland took the chair; and Mr. Lilwall, Mr. Goolden, Dr. Wilson, Mr. Geo. Wooley, and others, addressed the meeting, and shewed the necessity for improvement. The chairman said,—The Serpentine River had now become as certain a source of disease as the waters in the rivers of Africa. Indeed, he should say, from his own practical experience and observation, that the water in these rivers were not so foul or pestilential as that which constituted the Serpentine, the latter only requiring an equally high state of temperature to develope those diseases which appear in tropical climates.—The sum of 35,000*l*. was stated to be required for effecting the improvment. Surely the evil might be effectually remedied for a much less amount than this. If the mud be removed it must be done with great caution.

BLIND BUILDERS.—The following is a list of tenders for the brewery, &c. at Camberwell-green, for Mr. Fleming, Mr. Robt. Brown, architect, opened on the 9th inst.:—

Myers	£2,867	0	0
Crawley	2,512	0	0
Wells	2,490	0	0
Hill	2,296	0	0
Tombs	2,048	0	0
Willson	1,983	0	0
Brown	1,975	10	7
Thompson	1,885	0	0

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